STATE OF IOWA
DEPARTMENT OF COMMERCE
BEFORE THE IOWA UTILITIES BOARD

IN RE: DAKOTA ACCESS LLC
Docket No. HLP-2014-0001

DIRECT TESTIMONY OF
JOHN DOERSHUK
ON BEHALF OF
SIERRA CLUB IOWA CHAPTER

OCTOBER 12, 2015

EXHIBIT SIERRA CLUB–JD–1
Q. Please state your name and present employment.

A. My name is John Doershuk and I am the State Archaeologist of Iowa and Director of the Office of State Archaeologist at the University of Iowa.

Q. What are your duties as State Archaeologist and Director of the Office of State Archaeologist?

A. Chapter 263B of the Iowa Code establishes the duties of the State Archaeologist as follows:

The state archaeologist shall have the primary responsibility for the discovery, location and excavation of archaeological sites and for the recovery, restoration and preservation of archaeological remains in and for the state of Iowa, and shall coordinate all such activities through cooperation with the state department of transportation, the department of natural resources, and other state agencies concerned with archaeological salvage or the products thereof. The state archaeologist may publish educational and scientific reports relating to the responsibilities and duties of the office.

Q. With respect to the Dakota Access pipeline project, has your office been consulted by Dakota Access or any person or entity on behalf of Dakota Access?

A. No.

Q. Would your office ordinarily be consulted on a project like this?
A. Yes.

Q. Have you seen any archaeological reports regarding the Dakota Access project?

A. Yes. I have seen a report prepared by the firm Burns and McDonnell for Dakota Access dated December 2014. This report was prepared in connection with the permit Dakota Access is requesting from the Corps of Engineers and provides limited information on a subset of the areas identified at that time as sensitive for significant archaeological resources. In terms of archaeological investigation, it is woefully inadequate including because it fails to identify whether the work was accomplished in accordance with the published and readily web-accessible “Guidelines for Archaeological Investigations in Iowa” which is the standard protocol for such work in this state. These guidelines include how to define archaeological sites, consultation best practices, field survey methodologies, and most importantly reporting requirements.

Q. Organizationally is the Office of State Archaeologist in the same organization as the State Historic Preservation Office?

A. No. In Iowa the two entities are separate. In some states they are the same. This may explain why the consultants appear to be confused.
In those states where the offices are combined, the consultants consult with the State Historic Preservation Office that includes functions which in Iowa are handled by the State Archaeologist’s office. In Iowa, archaeology consultants need to contact both offices separately.

Q. Have you been in contact with Steve King at the Iowa State Historic Preservation Office (SHPO) about any information his office has received from Dakota Access?

A. Yes. Mr. King told me on 10/7/2015 he has not yet received needed information from Dakota Access for either the survey area associated with specific water bodies within the jurisdiction of the Corps of Engineers (COE) or the areas that Dakota Access indicated they would go ahead and investigate even though not required by the COE.

Q. Have you reviewed the prepared direct testimony of Monica Howard that was filed with the IUB on September 8, 2015?

A. Yes.

Q. Do you have any comments on that testimony?

A. Yes. In general, the protocol Ms. Howard claims in her testimony Dakota Access has followed is appropriate. However, the protocol relies on modeling, and modeling is helpful in guiding archaeological field investigations only if it is done correctly. Most importantly, there is no
indication that proper documentation on the field efforts has been compiled. Modeling and field work without documentation and the chance for review and comment is an incomplete and unacceptable effort. If any archaeological artifacts have been discovered and sites defined, those finds must be documented and reported to my office as well as to SHPO.

There is no indication in Ms. Howard’s testimony of the details of any archaeological survey work. It is critical these details are reviewed by knowledgeable professionals such as those at SHPO and in my office. The modeling needs to be reviewed for sufficiency. Neither SHPO nor my office have seen the modeling. Mr. Brant Vollman, archaeologist for the Rock Island COE handling the Dakota Access permitting informed me on October 2, 2015 that his request to review the archaeological modeling for Iowa was denied by Dakota Access. This makes no sense as it hampers adequate coordination by state reviewers with the federal review process and the additional archaeological investigations reportedly being undertaken by Dakota Access.

Ms. Howard’s testimony claims that there are approximately 74 miles of federal permit review areas. But to date, no information has been provided to SHPO or my
office as to where these federal review areas are specifically located or what archaeological investigation was actually conducted. Mr. Vollman indicates he is waiting to receive such information from Dakota Access.

Ms. Howard’s testimony also claims that approximately 20 miles of the COE (federal) permit review areas overlap with areas of high probability for archaeological sites based on the model. There is no indication in the testimony as to where these 20 miles are located. No valid assessment can be made without knowing where the overlap is.

Finally, Ms. Howard’s testimony claims that approximately 143 of 145 miles of the pipeline route allegedly requiring intensive field surveys based on the model have been completed, and that 29 isolated finds and 43 sites were documented. Again, SHPO and my office have yet to see the details of these investigations. Without the complete documentation it is impossible to judge and comment on the adequacy of the field effort.

Q. During an archaeological field study, is there a certain number of artifacts that constitute an archaeological site?

A. In Iowa, discovery of a single archeological item constitutes a “site.” In other states the standard may be different. In Iowa the term “isolated find” applies to
single artifacts only if they are completely out of context. A stone spear point found on a river sandbar clearly washed down from an unknown source could be recorded as an isolated find. That same spear point, if found embedded in a stream cutbank, would be considered “in context” and an archaeological site defined. The difference is in the level of documentation then generated about the discovery. Because of the integrity of context and potential to be considered eligible for the National Register of Historic Places, “sites” require more information than “isolated finds.”

It is not clear from Ms. Howard’s testimony how Dakota Access and its consultants are determining what constitutes a site and how or why they are recording isolated finds. This information needs to be provided for review before a permit to build the pipeline is issued.

Q. Have you seen any documentation of the archeological finds?

A. I have seen the text portions of some of the archaeological site form submissions; these forms are the first step documentation required as part of adequate reporting. I have not yet seen mapping associated with these forms or the details of the methods and results which
led to discovery of these sites and most importantly their
evaluation.

Q. Have you been able to determine how deep the
excavations have been made during the archaeological field
studies and why is that important?
A. No, it is not clear from the report how deep the
digging has been during the field studies. Likewise Ms.
Howard’s prepared testimony does not indicate the depth of
the field studies.

Typically archaeological survey ("Phase I")
investigations in Iowa account for impacts by construction
to depths that exceed the maximum depth of planned
construction by 1-2 ft. This allows for indirect effects of
compaction and erosion. So, archaeological field work for
Dakota Access needs to account for deposits that are in
many places 8 to 12 feet deep given construction plans,
especially in areas where stream crossings are planned.

This is particularly important since most of the
archaeological sites known and on record in Iowa are near
rivers, streams, and creeks. Layers of sediment build up
over the decades and centuries in these landscape settings,
necessitating deeper test excavations compared to upland
areas to adequately assess archaeological significance.
Further, the pipeline is scheduled to be built at depths that could intrude on sites that have not been discovered from the surface surveys. On many upland landforms in Iowa there is little to no preservation potential below depths that plowing has not disturbed, however there are extensive areas where more deeply buried and potentially significant archaeological deposits may be preserved which show no hint of their existence at the surface or within the soil matrix that modern agricultural practices might impact.

It is doubtful given the scale of effort typical in pipeline construction and lack of training and experience in what to look for that construction crews would be able to properly detect archaeological sites if they were dug into during construction. Accidental discovery of significant archaeological deposits during construction, especially any that involve human remains, will present challenging legal circumstances for all concerned. Part of the reason archaeological surveys are done ahead of the construction is to allow the project to be moved away from significant archaeological sites.

Q. Do you believe that the whole corridor of the pipeline needs to be surveyed?
A. Yes, such an approach would be typical if this were a natural gas pipeline or Iowa Department of Transportation corridor.

Q. Is it clear from the information you have reviewed how Dakota Access has moved the route based on archaeological finds?

A. No. Our office needs a complete report to evaluate.

Q. Would you expect that Dakota Access would develop a plan for dealing with unanticipated discoveries found during the construction of the pipeline?

A. Yes, and my office needs to review the plan for adequacy and conformance with the Iowa Code sections which protect ancient human remains before the pipeline is constructed. My office does not grant permits but as the Iowa Code indicates, coordination with responsible agencies is expected. We expect the Iowa Utilities Board to require adequate archaeological survey and development of unanticipated discovery planning before they issue the permit to build the pipeline.

Q. Has Dakota provided adequate information to assess the sufficiency of their work?

A. No, our office is not able at this time to judge the sufficiency of their work in meeting the Guidelines for Archaeological Investigations in Iowa (Kaufmann 1999).
Q. Did you submit a comment letter to the Board on May 22, 2015?
A. Yes. It is attached to this testimony as Exhibit Sierra Club-JD-2.

Q. Does this conclude your prepared testimony?
A. It does.